

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Mark L. Weiss  
Serial No.: 10/647,361 Group No.: 1632  
Filed: 08/25/2003 Examiner: Thaian Ton  
Entitled: **Cultures, Products and Methods Using Stem Cells**

**SECOND DECLARATION OF DR. KATHY MITCHELL**

**EFS WEB-FILED**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

CONSIDERED 12/17/09 /TNT/

I, Dr. Kathy Mitchell, state as follows:

1. My present position is Senior Scientist, Message Pharmaceuticals, 1448 S. Rolling Road Baltimore, MD 21227. Message Pharmaceuticals is a licensee of the above referenced patent application.

2. I am an inventor of the above referenced patent application.

3. It is my understanding that Examiner has rejected the claims as being non-enabled, lacking an adequate written description, and as anticipated by Purchio et al., U.S. Pat. No. 5,919,702. In the telephonic interview on October 28, 2008, the Examiner suggested presenting data that further described the claimed cell population and that demonstrated how the cell population obtained by the claimed process differ from the prechondrocytes of Purchio et al. and the Wharton's Jelly extract used by Purchio et al. as well as embryonic stem cells.

4. The cell population obtained by the process described in the claims; a) enzymatically dispersing umbilical cord matrix to provide enzymatically dispersed umbilical cord matrix cells; b) culturing the enzymatically dispersed umbilical cord matrix cells in the presence of epidermal growth factor (EGF) and platelet derived growth factor (PDGF) to proliferate the umbilical cord matrix cells; c) culturing the enzymatically dispersed umbilical cord matrix cells on a substrate surface and removing non-adherent cells; and d) culturing